
Status Report From ASTM's Care Labeling Committee

Jo Ann Pullen

American Society for Testing and Materials

Ms. Pullen is the K-12 Health Coordinator, Department Head, and Teacher of Family, Consumer, and Health Sciences at Pioneer Valley Regional School in Northfield, Massachusetts. She has been an active consumer member of the American Society for Testing and Materials Committee D13 on Textiles for 19 years. Ms. Pullen is a doctoral student in Occupational Education at the University of Massachusetts, holds an M.S. in Textiles and Clothing from Cornell University, and earned a B.S. in Family and Consumer Sciences Education from Pennsylvania State University.

First, I'm going to give you a little background about the American Society for Testing and Materials (ASTM). ASTM's Committee D13 on textiles is 82 years old, and I'm the first woman chairman of the Subcommittee of Care Labeling. We also have committees for writing various standards. The D13 committees include producers, users, government, academia, and consumers. We write consensus standards, which are approved by ballot. If the draft of a standard receives a negative vote, it has to be in writing, it has to be technical or editorial, and we have to resolve that negative in writing before we can proceed with revisions. We have been through many ballots. Committee D13 has over 325 standards in their handbook. We work together with the American Association of Textile Chemists and Colorists, which also writes standards, so that we're harmonized in that sense. Our standards are backed by research, member expertise, and confirmation testing, if it is something that needs a round robin trial to prove that it works.

Our goals are to promote knowledge of textiles and develop consensus standards for textiles and related material. We have four standards. We have one that is the care symbols. We have another that is evaluating care information, which is simply a guide that tells the manufacturer to set some criteria and then to test it and write their report. We also have a standard definition of terms for apparel, and we have one for pile floor coverings.

The care symbols system is based on a simple pattern: three dots is hot or high, two dots is warm or medium, and one dot is cool or cold, or low setting. So in the washing, there's high, medium, and low for temperatures. If it is the washing machine, the tumble

dryer, or the iron, three dots is always hot or high, two dots is warm or medium, and one dot is cool or cold.

On the cycles for the appliances, a plain symbol is the normal cycle, one underline or minus sign is permanent press (meaning reduce the action), and two minus signs mean delicate or gentle. We also have a symbol for hand wash. In the United States we specify temperature. In Canada, I think their standard is 30°C, and in Europe it's 40°C, so that is one point for harmonization. In addition, there is a symbol for machine wash warm, or the permanent press cycle.

Regarding bleaching, ASTM was working with the Federal Trade Commission rule. We took the glossary of terms and decided to work on a symbol for each term, to make us harmonize the best we can. We took all the International Organization for Standards (ISO) comments on that draft and standards that weren't met in the ISO standard, then we invited Canada and several other countries—Japan, Australia, and Mexico—to work with us. We had 15 countries in ASTM's D13 committee at the time we developed this. We have a symbol for only non-chlorine bleach (which is very commonly used in the United States), any "bleach," and "do not bleach." The reason for the solid "do not bleach" symbol is that the regular triangle with an "X" in it means "do not chlorine bleach." In the United States, you need to have an instruction, not a warning for bleach; you say "only non-chlorine bleach" when needed.

The drying symbols are the same as Canada's and Mexico's. The European or ISO system has no natural drying symbols, and they do not have a non-chlorine bleach symbol, so the European or ISO system partially meets U.S. needs. The ASTM system has symbols for

tumble dry, normal, permanent press, delicate, three temperatures, no heat, and do not tumble dry. For ironing, we have high, medium, low setting and an additional symbol to warn “no steam.”

Now we get into what you're interested in: dry cleaning. Currently, ASTM adopts the ISO terminology for solvents. For example, there is a symbol that stands for any solvent (which is used mainly for perchloroethylene [perc]). The beauty of the ASTM system is that as we are reaching out more and as people are becoming more interested, it simply takes a draft we all agree on, and then we revise the standard. We do not have to wait 5 years. If technology changes and a new, more environmentally friendly dry cleaning solvent is found, the entire industry and government agree on a symbol through ASTM, we ballot it, and it's added to the standard.

The reason that the single underline (used in Europe, meaning short cycle and/or reduce moisture, and/or low heat, and/or no steam finishing) was separated is because ASTM is not allowed to put out one symbol that means four things. In that situation, the person who is reading the symbol has to make the decision which of those four things it means. At ASTM, we're proud of the fact that our standards are technically clear. One underline that means four different instructions is not technically clear, so it goes against the way ASTM is allowed to do business. In the standard, you may use a symbol and then spell out what that means. If you want to say low heat or reduced moisture, you don't have to use that symbol. You may use symbols and words together. So it will work for a Canadian system where they have the dry clean circle and they use words. The difficulty in North America is you need words in three languages.

In speaking with Helmut Kruessman who is chairman of the GINETEX Technical Committee, he says that P is commonly used to indicate “professional dry cleaning.” I have also learned that GINETEX proposed a W for wet clean and Japan proposed a W for “white spirit” if F was not acceptable as a clear instruction. So you see we're ready to discuss this and figure out what works and revise the standard if we need to for dry cleaning. But we need some symbols to identify the solvent, perc and/or petroleums or petroleum only, and as wet cleaning becomes more common, we'll need a symbol for that as well. We had originally begun with a symbol with WC in it for professional wet cleaning to alert people that this is a different process than dry cleaning. Now Europe is considering redefining the circle as professional cleaning. Then we could use the WC or W, but come to an agreement on what the letters would be for wet clean, petroleum, and perc.

The good news is we're all here together working on this, and the better news is that when we decide it, we'll all do it together. It takes about 3 months to get through the balloting process. I am so glad that we're internationally discussing these situations and will come to agreement. As you can see, in two days my overheads are out of date, because I've talked to more people and it looks good.

When I go to a classroom, I use a chart that has a lot of lines on it and a chart with no lines breaking things up, and have children decode four symbols. Then I ask them to do some meta-cognition, thinking about the thinking. Which chart were you most comfortable with? The random thinker, or the creative thinker, likes the chart with no constrictions. The organized, sequential thinker likes the chart with the lines. So I thought I'd educate you about that, that when it comes to consumer education, you've got two different frames out

Committee D-13 on Textiles

- Promotes knowledge of textiles
- Develops consensus standards for textiles and related materials

DEVELOPS STANDARDS FOR:

Fibers

Yarns and Cords

Fabrics and Fabric Systems

Physical Testing

Flammability

Home Decorating Products

Apparel Products

Notions

Sizing

Care Labeling

Nonwovens

Inflatable Restraints

Committee D-13 on Textiles

Working together











































- **Producers**
- **Users**
- **General Interests**
- **Consumers**

Writing consensus standards

COMMITTEE D-13 ON TEXTILES

Over 325 Standards

**Standards development
backed by
research,
member expertise,
and
confirmation testing.**

ASTM GUIDE TO CARE SYMBOLS																		
 Wash	Machine wash cycles  normal  permanent press  delicate / gentle  hand wash	Warning symbols for laundering  do not wash  do not bleach  do not dry (use with do not wash)  do not iron																
	Water temperatures (maximum) symbol (s) <table border="1"> <tr> <td>(200F)</td> <td>(160F)</td> <td>(140F)</td> <td>(120F)</td> <td>(105F)</td> <td>(60F-50F)</td> </tr> <tr> <td>95C</td> <td>70C</td> <td>60C</td> <td>50C</td> <td>40C</td> <td>30C</td> </tr> <tr> <td>●●●●</td> <td>●●●●</td> <td>●●●●</td> <td>●●●●</td> <td>●●</td> <td>●</td> </tr> </table>					(200F)	(160F)	(140F)	(120F)	(105F)	(60F-50F)	95C	70C	60C	50C	40C	30C	●●●●
(200F)	(160F)	(140F)	(120F)	(105F)	(60F-50F)													
95C	70C	60C	50C	40C	30C													
●●●●	●●●●	●●●●	●●●●	●●	●													
 Bleach	 any bleach when needed  only non-chlorine bleach when needed																	
 Dry	Tumble dry cycles  normal  permanent press  delicate / gentle  line dry / hang to dry  drip dry  dry flat	Additional instructions (in symbols or words)  do not wring  do not tumble dry  in the shade (added to line dry, drip dry, or dry flat)  no steam (added to iron)																
	Tumble dry heat setting  any heat  high  medium  low  no heat / air																	
 Iron	Iron—dry or steam  read/iron temperature  200 C (392 F) high  160 C (320 F) medium  110 C (230 F) low																	
 Dryclean	Dryclean - normal cycle  any solvent  any solvent except trichloroethylene  petroleum solvent only  do not dryclean	Dryclean - additional instructions  short cycle  reduce moisture  low heat  no steam finishing																

Reprinted, with permission, from
1997 Annual Book of ASTM Standards

Note: This Figure illustrates the symbols used for laundering and drycleaning instructions. As a minimum, laundering instructions include, in order, four symbols: washing, bleaching, drying, and ironing; and, drycleaning instructions include one symbol. Additional symbols or words may be used to clarify the instructions.

ASTM D5499-96b FIG. 1 Commercial and Home Laundering and Drycleaning Symbols








Copyright ASTM.
Reprinted with permission.

ASTM D5489 GUIDE TO CARE SYMBOLS



Wash

CYCLE + H₂O TEMP = SYMBOL

 normal	50C ●●● (120F)	
 permanent press	40C ●● (105F)	 machine wash, 40C (warm), permanent press
 delicate / gentle	30C ● (65F-85F)	
 hand wash 40C (105F)	 hand wash 30C (65-85F)	 do not wash

ASTM D5489 GUIDE TO CARE SYMBOLS



Bleach



**any bleach
when needed**



**only non-chlorine
bleach when needed**



do not bleach



Dry



**line dry /
hang to dry**



drip dry



dry flat



**in the shade
(added to line dry,
drip dry, or dry flat)**

ASTM D5489 GUIDE TO CARE SYMBOLS



Dry



Tumble Dry

CYCLE + HEAT SETTING = SYMBOL

 normal	 high	 tumble dry, high
 permanent press	 medium	
 delicate / gentle	 low	
	 no heat	



do not tumble dry

ASTM D5489 GUIDE TO CARE SYMBOLS



Iron

(dry or steam)



high
200C (390F)



medium
150C (300F)



low
110C (230F)



no steam
(added to iron)



medium iron
no steam

ASTM D5489 GUIDE TO CARE SYMBOLS



Dryclean



normal,
any solvent



normal, any sol-
vent except
trichloroethylene



normal,
petroleum
solvent only



do not
dryclean



short
cycle



reduce
moisture



low
heat



no steam
finishing

